

Int B1  
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1. (amended) A method for generating an application specific program utilizing an abbreviated instruction set comprising the steps of:

- generating a native program for an application utilizing a set of native instructions having a first fixed number of bits;
- debugging the native program;
- processing the debugged native program to determine an abbreviated instruction set having a second fixed number of bits less than the first fixed number of bits and corresponding to the set of native instructions; and
- converting the native program to the application specific program by replacing the set of native instructions with the abbreviated instruction set.

Int B3  
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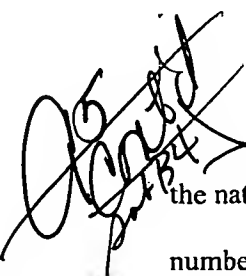
26. (amended) A method for translating abbreviated instructions into a native instruction format comprising the steps of:

- fetching an abbreviated instruction having a first fixed number of bits from a memory tailored to storage of abbreviated instructions;
- dynamically translating the abbreviated instruction into the format of a native instruction in a sequence processor (SP) array controller said native instruction having a second fixed number of bits greater than said first fixed number; and
- dispatching the native instruction to a processing element for execution.

Int B4  
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49. (amended) A system for translating abbreviated instructions into a native instruction format comprising:

- a memory storing an abbreviated instruction having a first fixed number of bits;
- means for fetching the abbreviated instruction from the memory; and

 means for dynamically translating the abbreviated instruction into a native instruction in the native instruction format having a second fixed number of bits greater than said first fixed number.

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